



Intrahepatic Cholestasis of Pregnancy

Quick Facts:

- Intrahepatic cholestasis of pregnancy (ICP) is a disease that affects the liver during pregnancy.
- It usually causes no problems for the pregnant person. It carries a small increased risk of stillbirth, preterm birth, and other problems for the fetus.
- ICP can cause itching, which may be intense. Other symptoms include nausea, loss of appetite, and fatigue.
- Treatment includes medication, antenatal testing, and early delivery.

What is intrahepatic cholestasis of pregnancy?

- Ⓞ **Intrahepatic cholestasis of pregnancy (ICP)** is a liver condition that can happen during the second and third trimesters of pregnancy. ICP affects the normal flow of **bile**, a yellowish-green substance produced in the liver.
- Ⓞ ICP is not very common, affecting only about 1% of pregnancies in the United States.

What causes ICP?

- Ⓞ **Bile** contains bile acids, **bilirubin**, water, and **cholesterol**. From the liver, bile passes through tubes called bile ducts and is stored in a small organ called the gallbladder. During digestion, bile is released from the **gallbladder** into the intestines, where it helps break down fats. It then returns to the liver, where it is reused to make more bile.
- Ⓞ In ICP, the flow of bile from the liver is slowed or stops (cholestasis). Pregnancy hormones are thought to be the cause of these changes in bile flow. As a result, bile builds up in the liver (intrahepatic means “in the liver”), causing bile acid levels in the blood to increase.

Can ICP be harmful to me or the fetus?

ICP doesn't usually cause problems for a pregnant person, and it typically goes away after delivery. But there is a small risk for problems for the fetus. The risk of **stillbirth** is slightly increased in ICP. The risk is highest when bile acid levels are very high. The chance of **preterm** birth, which can happen either on its own or because of a decision to deliver the baby early, is increased in ICP. The risk of the baby having breathing problems is also higher.

What are the symptoms of ICP?

- Ⓞ **ICP** causes itching, which can be intense. The hands and soles of the feet are the most common areas affected, but itching can occur anywhere on the body. No one is sure what causes the itching in ICP, but it's thought that bile acids can irritate the skin. Itching can come and go, or it can be severe all the time. It may be so bad that it prevents sleep. Some people with severe itching from ICP can scratch so hard that the skin bleeds. The itching with ICP does not cause a rash, but scratching may cause rash-like marks on the skin.
- Ⓞ **Jaundice** occurs in a few people with ICP. It's caused by an increase in bilirubin in the bloodstream.
- Ⓞ Other symptoms include pain in the upper right abdomen (where your liver is located), nausea, fatigue, and loss of appetite.

How is ICP diagnosed?

- Ⓞ ICP is diagnosed with a blood test that confirms increased levels of bile acids.
- Ⓞ There are some cases of ICP where itching is present, but bile acid levels are normal. In this case, other conditions that cause itching in pregnancy need to be ruled out before ICP is diagnosed.
- Ⓞ If your itching doesn't go away and the initial bile acids were normal, the bile acid test may be repeated to see if the levels are rising.

What is the treatment for ICP?

- Ⓞ **Ursodeoxycholic acid (UDCA)** is the most commonly used drug to treat ICP. UDCA starts to relieve itching within 1 or 2 weeks.
- Ⓞ **Antenatal testing** is done to check fetal

well-being starting in the third trimester. How often testing is performed depends on bile acid levels and whether other problems are present. If bile acid levels are very high, it may be done more frequently.

- ⦿ Early delivery is a way to prevent possible stillbirth. If bile acid levels are very high (100 umol/L or greater), delivery is recommended at 36 weeks and sometimes earlier in some situations. With lower bile acid levels, delivery is recommended between 36 and 39 weeks.

How are delivery decisions made in ICP?

- ⦿ The decision about when to have your baby to prevent possible stillbirth should be balanced against the risks that preterm babies face. These include trouble staying warm, feeding difficulties, and breathing problems. The risks increase the earlier a baby is born. Preterm birth can also happen on its own in ICP. These delivery decisions can be complex. You and your health care professional will discuss the risks and benefits of all your options before deciding what's best for you and your baby.
- ⦿ A **corticosteroid** medication can help the fetal organs mature if delivery is planned for earlier than 37 weeks.

If I had ICP in one pregnancy, will I have it in future pregnancies?

ICP tends to happen again in future pregnancies. Experts think that ICP may run in families.

I have been diagnosed with ICP, and I am very worried. What resources are out there?

Having ICP can be scary, and it can cause a lot of stress and anxiety. But remember: most people with ICP have healthy babies. Learning about the disease and how others have coped can help calm your fears. Here are some resources that offer information about ICP:

- ⦿ **ICP Care:** A website dedicated to education and support of people with ICP. Offers a support group and stories from people who've had ICP.
- ⦿ **March of Dimes:** This organization has a web page about ICP, including symptoms, diagnosis, and treatment.
- ⦿ **BabyCenter:** This popular website has lots of information about ICP.

To find a maternal-fetal medicine subspecialist in your area, go to <https://www.smfm.org/members/search>.

See glossary on next page

Glossary

Antenatal Testing: Testing that is done to check the well-being of the fetus later in pregnancy.

Bile: A yellow-green substance made in the liver and stored in the gallbladder. During digestion, it helps to break down fats.

Bilirubin: A yellow pigment made during the normal breakdown of old red blood cells. The liver processes bilirubin so that it can be excreted in the stool.

Cesarean Delivery: Surgery in which a baby is delivered through a cut (incision) in the mother's uterus.

Cholesterol: A substance found in the cells of the body that's used to make hormones, vitamin D, and bile.

Corticosteroids: A type of drug given to help a fetus' organs mature when there is a risk of preterm birth occurring in the next 7 days.

Gallbladder: The organ in which bile is stored.

Hormones: Chemical messengers made by one organ or tissue that are transported through the bloodstream to affect another tissue or organ. Examples include estrogen, thyroid hormone, and insulin.

Intrahepatic Cholestasis of Pregnancy (ICP): A condition that affects pregnant women in which the normal flow of bile from the liver to the small intestine is slowed or stopped.

Jaundice: A yellowish coloration of the skin and whites of the eyes caused by too much bilirubin in the bloodstream.

Placenta: A special organ made by a woman's body during pregnancy. It allows the transfer of nutrients, antibodies, and oxygen to the fetus from the woman. It also makes hormones that sustain the pregnancy.

Preterm: Delivery of a baby before 37 weeks of pregnancy.

Stillbirth: Death of a fetus prior to delivery.

Trimesters: The three-month periods in which pregnancy is divided. The first trimester is months 1 to 3 (weeks 1 to 12); the second trimester is months 4 to 6 (weeks 13 to 27); and the third trimester is months 7 to 9 (weeks 28 to 40).

Ursodeoxycholic Acid (UDCA): A drug used to treat ICP. It works by helping bile flow through the liver and protecting liver cells.

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